

-- (see FIG. 8) --

At page 29, line 10, change "forme" to -- formed --

At page 32, line 20, change "electrolytically the solder" to -- the solder electrolytically --

At page 34, line 11, change "then" to -- than --

At page 35, line 23, change "spacial" to -- spatial --

After page 50, insert the following (as page 51) --

DISCLOSURE
ABSTRACT OF THE INVENTION

A method for manufacturing raised contacts on the surface of an electronic component includes bonding one end of a wire to an area, such as a terminal, of the electronic component, and shaping the wire into a wire stem configuration (including straight, bent two-dimensionally, bent three-dimensionally). A coating, having one or more layers, is deposited on the wire stem to (i) impart resilient mechanical characteristics to the shaped wire stem and (ii) more securely attach ("anchor") the wire stem to the terminal. Gold is one of several materials described that may be selected for the wire stem. A variety of materials for the coating, and their mechanical properties, are described. The wire stems may be shaped as loops, for example originating and terminating on the same terminal of the electronic component, and overcoated with solder. The use of a barrier layer to prevent unwanted reactions between the wire stem and its environment (e.g., with a solder overcoat) is described. Bonding a second end of the wire to a sacrificial member, then removing the sacrificial member, is described. A plurality of wire stems may be formed on the surface of the electronic component, from different levels thereon, and may be severed so that their tips are coplanar with one another. Many

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wire stems can be mounted, for example in an array pattern, to one or to both sides of electronic components including semiconductor dies and wafers, plastic and ceramic semiconductor packages, and the like. --